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The Cartographic Application of ERTS/RBV
Imagery in Polar Regions

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Type I Progress Report
ERTS-A

a. Title: The Cartographic Application of ERTS/RBV Imagery in Polar Regions

ERTS/A Proposal No. 149

b. GSFC ID No. of P.I.: IN 391

c. Statement and explanation of any problems that are impeding the progress of investigation:

No imagery has been received from NASA over the Antarctic Region since March 1973.

The NASA Catalogs and related information indicate that the Arctic Region is mostly covered by imagery. Much less is being received on automatic distribution from NASA to support this proposal. The reason is probably because a great deal of the imagery contains more cloud coverage than the proposal specifications calls for.

d. Discussion of the accomplishments during the reporting period and those planned for the next reporting period:

Antarctica

ERTS-1 scene, 1174 19433-7, 13 Jan 73 has been enlarged to 1:500,000 scale. The scene covers the Ross Island and Dry Valley area. Perhaps more scientific programs and investigations are conducted within this area than any one single area of the Antarctic. Marginal information and a grid have been prepared for the single scene photoimage product. Plans are to have it ready for reproduction during the next reporting period.

ERTS imagery is being used to update the 1:1,000,000-scale IMW manuscript, McMurdo Sound Region, before printing.

A photoimage strip mosaic at 1:1,000,000 scale of the Victoria Land Coast is being prepared using ERTS imagery.

Arctic

ERTS imagery is being used in a cooperative effort between USGS and the American Geographical Society (AGS) of New York to revise the AGS 1:3,000,000-scale Arctic Region manuscripts and to compile a photo-image mosaic of the Arctic Region at 1:5,000,000 scale from 60°N to the Pole as identified in Experiment No. 6. The AGS map will also be published at a scale of 1:5,000,000. 70MM contract prints are being used for updating the map and for laying the mosaic. The work is being accomplished by quadrants. The Alaska-Western Canada quadrant (90°W-180°) appears to be the only quadrant with enough imagery for mosaic consideration. Plans are to continue this cooperative effort through the next reporting period.

Cloud-free imagery has been selected for the Fairbanks, Alaska 1:1,000,000-scale mosaic, (Experiment No. 7). The mosaic is being compiled at 1:1,000,000 scale. It will be gridded and printed to conform to the IMW format. Final compilation is expected by the end of the next reporting period.

- e. Discussion of significant scientific results and their relationship to practical applications or operation problems including estimates of the cost benefits of any significant results (To be prepared in scientific abstract form of 200 words or less): N/A
- f. A listing of published articles, and/or papers, preprints, in-house reports, abstracts of talks, that were released during the reporting period: N/A
- g. Recommendation concerning practical changes in operations, additional investigative effort, correlation of effort and/or results as related to a maximum utilization of the ERTS system: N/A
- h. A listing by date of any changes in Standing Order Forms: N/A
- i. ERTS Image Descriptor forms: N/A
- j. Listing by date of any changed Data Request forms submitted to Goddard Space Flight Center/NDF during the reporting period: N/A
- k. Status of Data Collection Platforms (if Applicable): N/A